

Attorney Docket No.: SJ-0005
Inventors: Danks et al.
Serial No.: 09/595,682
Filing Date: June 16, 2000
Page 3

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-11 (canceled).

Claim 12 (currently amended): A method for sensitizing tumor cells to a chemotherapeutic prodrug APC or CPT-11 in vitro ~~capable of being cleaved by a carboxylesterase~~ comprising transfecting selected tumor cells with a composition comprising an isolated polynucleotide encoding a carboxylesterase ~~which cleaves a chemotherapeutic prodrug~~ wherein said carboxylesterase is operably linked to a promoter that directs expression of said carboxylesterase in said tumor cells, and wherein expression of the carboxylesterase renders the tumor cells more sensitive to the cytotoxic effect of said chemotherapeutic prodrug APC or CPT-11.

Claim 13 (currently amended): A method of inhibiting tumor cell growth in vitro comprising:

(A) sensitizing tumor cells in accordance with the method of claim 12; and

(B) contacting said sensitized tumor cells with said chemotherapeutic prodrug CPT-11 or APC so that tumor cell growth is inhibited.

Attorney Docket No.: SJ-0005
Inventors: Danks et al.
Serial No.: 09/595,682
Filing Date: June 16, 2000
Page 4

Claims 14-17 (canceled).

Claim 18 (currently amended): A method of inhibiting tumor growth in a patient comprising administering to a patient a composition comprising an isolated polynucleotide encoding a rabbit carboxylesterase capable of cleaving a chemotherapeutic prodrug APC or CPT-11 and inactive metabolites thereof to active drug, wherein said rabbit carboxylesterase is operably linked to a promoter that directs expression of said rabbit carboxylesterase in a tumor, wherein the dosage of said composition is one determined to produce the longest delay of recurrent disease and wherein the composition is carried by an adenoviral vector which is administered intratumorally or intravenously, and wherein the chemotherapeutic prodrug APC or CPT-11 is administered intravenously.

Claims 19-21 (canceled).

Claim 22 (currently amended): The method according to claim 12 wherein the carboxylesterase is selected from the group consisting of rabbit ~~polynucleotide~~ carboxylesterase and human intestinal ~~polynucleotide~~ carboxylesterase.

Claim 23 (currently amended): The method according to claim 12 wherein the carboxylesterase comprises a rabbit ~~polynucleotide~~ carboxylesterase.

Attorney Docket No.: SJ-0005
Inventors: Danks et al.
Serial No.: 09/595,682
Filing Date: June 16, 2000
Page 5

Claim 24 (currently amended): The method according to claim 12 wherein the carboxylesterase comprises a human intestinal ~~polynucleotide~~ carboxylesterase.

Claim 25 (previously presented): The method according to claim 12 wherein the method is performed *ex vivo*.

Claim 26 (previously presented): The method according to claim 12 wherein the carboxylesterase is delivered by an adenoviral vector.

Claim 27 (previously presented): The method according to claim 13 wherein the chemotherapeutic prodrug is a camptothecin.

Claims 28-29 (canceled).

Claim 30: (new) A method of inhibiting tumor growth in a patient comprising administering to a patient a composition comprising an isolated polynucleotide encoding a carboxylesterase capable of cleaving a chemotherapeutic prodrug APC or CPT-11 and inactive metabolites thereof to active drug, wherein said carboxylesterase is operably linked to a promoter that directs expression of said carboxylesterase in a tumor, wherein the dosage of said composition is one determined to produce the longest delay of recurrent disease.